



**GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE**

**AUTHORIZED FEDERAL SUPPLY SCHEDULE PRICELIST
ENVIRONMENTAL SERVICES**

FSC GROUP: 899



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Other than Small Business

www.fugroearthdata.com

Contract #GS-10F-0444P

Contract Period: 28 July 2004 through 27 July 2019.

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at fss.gsa.gov.

On line access to contract ordering information, terms and conditions, up to date pricing, and the option to create an electronic delivery order are available through GSA Advantage!, a menu driven database system. The INTERNET address of GSA Advantage! is: GSAAdvantage.gov.



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1 CUSTOMER INFORMATION

- 1a. Table of awarded special item number(s) with appropriate cross-reference to item descriptions and awarded price(s).

TABLE OF AWARDED SPECIAL ITEM NUMBERS (SINs):	
SINs	CROSS REFERENCED PAGE #
899-1 / 899-1RC Environmental Planning Services & Documentation	Data
899-7 / 899-7RC Geographic Information Systems (GIS)	Data

- 1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract. This price is the Government price based on a unit of one, exclusive of any quantity/dollar volume, prompt payment, or any other concession affecting price. Those contracts that have unit prices based on the geographic location of the customer, should show the range of the lowest price, and cite the areas to which the prices apply.

Not Applicable

- 1c. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles, experience, functional responsibility and education for those types of employees or subcontractors who will perform services shall be provided.

See pages 6 through 15 for a description and pricing of all items.

2. Maximum order:

MAXIMUM ORDER SPECIAL ITEM NUMBERS (SINs):	
SINs	MAX. ORDER
899-1 / 899-1RC Environmental Planning Services & Documentation	\$1,000,000
899-7 / 899-7RC Geographic Information Systems (GIS)	\$1,000,000

3. Minimum order: \$100

4. Geographic coverage (delivery area): Worldwide

5. Point(s) of production (city, county, and State or foreign country): Not Applicable

6. Discount from list prices or statement of net price: Prices shown are net.

7. Quantity discounts: None

8. Prompt payment terms:

Net 30 Days. Information for Ordering Offices: Prompt payment terms cannot be negotiated out of the contractual agreement in exchange for other concessions.

9a. Notification that Government purchase cards are accepted at or below the micro-purchase threshold.

Government purchase cards are acceptable for all orders

9b. Notification Whether Government Purchase cards are accepted or not accepted above the micro-purchase threshold.

Government purchase cards are acceptable for all orders

10. Foreign Items (list items by country of origin): Not Applicable

11a. Time of Delivery: As mutually agreed to by ordering agency and Fugro EarthData.

11b. Expedited Delivery: See 11a

11c. Overnight and 2-day delivery: See 11a



- 11d. **Urgent Requirements:** See 11a
- 12. **F.O.B. point:** Destination
- 13a. **Ordering Address(es).**
Fugro EarthData, Inc.
7320 Executive Way
Frederick, MD 21704
- 13b. **Ordering Procedures:** For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA's) are found in Federal Acquisition Regulation (FAR) 8.405-3.
- 14. **Payment Address:**
Fugro EarthData, Inc
P.O. Box 301492
Dallas, TX 75303-1492
- 15. **Warranty Provision:** Standard Commercial Warranty
- 16. **Export Packing Charges:** Not Applicable
- 17. **Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level).**
Government purchase cards are acceptable for all orders
- 18. **Terms and Conditions of Rental, Maintenance, and Repair:** Not Applicable
- 19. **Terms and Conditions of Installation:** Not Applicable
- 20. **Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices:** Not Applicable
- 20a. **Terms and Conditions for Any Other Services:** Not Applicable
- 21. **List of service and distribution points:** Not Applicable
- 22. **List of participating dealers:** Not Applicable
- 23. **Preventive maintenance:** Not Applicable
- 24a. **Special attributes such as environmental attributes:** Not Applicable
- 24b. **If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor's website or other location.) The EIT standards can be found at: www.Section508.gov/.**
Not Applicable
- 25. **Data Universal Number System (DUNS) number:** 06-842-6845
- 26. **Notification regarding registration in Central Contractor Registration (CCR) database.**
Registered with CCR and System for Award Management (SAM.gov)

2 COMPANY PROFILE

Since 1955 Fugro has provided mapping solutions for state, municipal, and federal government customers who rely on accurate geospatial information for a variety of activities. Fugro's aerial acquisition and processing capabilities are supported by a highly experienced team of pilots, sensor operators, field crews, geospatial analysts and project managers who possess the experience and expertise to meet the needs of our customers.

Fugro owns and maintains a large fleet of aircraft / sensors configured for acquisition of imagery, LiDAR, IFSAR and other data. Fugro offers a wide range of data processing/GIS services for the production of orthophoto, topographic/planimetric maps; and GIS services. Our staff of professionals includes Registered Professional Engineers, ASPRS Certified Photogrammetrists, FAA certified pilots, aerial acquisition specialists, GIS specialists, and other additional support personnel.

Fugro employees participate in ongoing, advanced technical training to keep abreast of technological changes and are adept at employing the latest mapping technologies and applying industry standards to deliver high quality accurate aerial imagery and digital mapping products. Together we have completed thousands of major design mapping projects throughout the United States and internationally.

Our commitment to the field of photogrammetry drives us to adopt new technologies and services. We are proud to offer the benefits from this investment to our clients in the form of high-quality, low-cost effective products and services. Fugro's full scope of professional geospatial services available includes:

- Acquisition and Processing for Digital Imagery (Ortho and Oblique)
- Acquisition and Processing of LiDAR data
- Digital Elevation Model (DEM) Collection
- Topographic/Planimetric Map Production
- Acquisition and Processing of RADAR/IFSAR data using the GeoSAR System

2.1 Digital Aerial Imagery Acquisition and Processing Services

Fugro provides imagery-based mapping solutions, including ortho and oblique aerial imagery for state, municipal, and federal government customers who rely on accurate geospatial data for a variety of GIS activities.

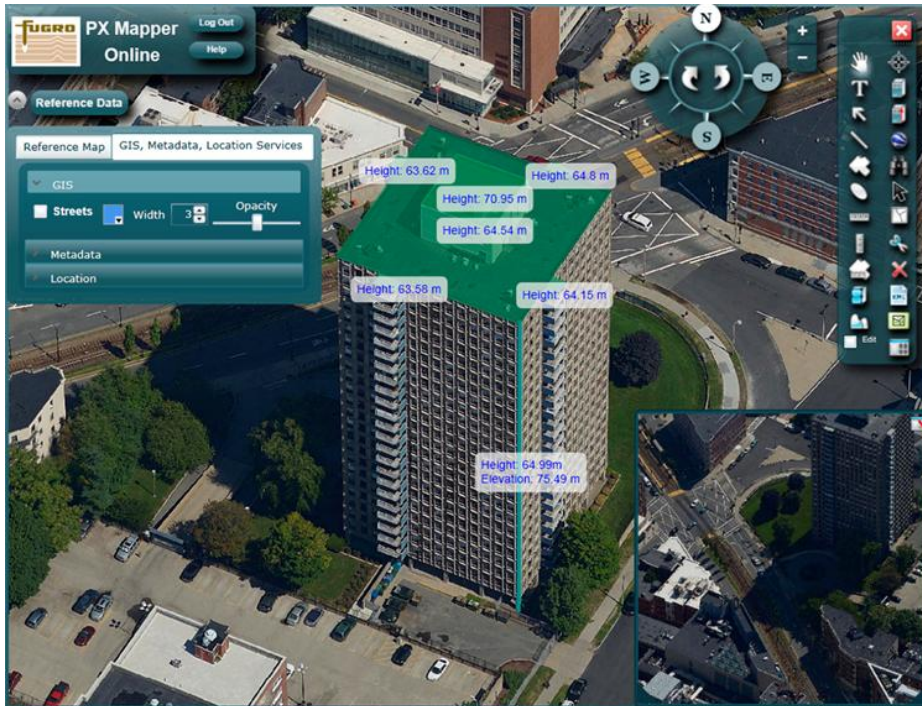
Fugro transforms data from a wide range of aerial sensors into spatially accurate map products and GIS datasets. Employing various mapping platforms, we offer imagery solutions that include digital photogrammetry, topographic and planimetrics, multispectral, hyperspectral, and thermal imaging. A variety of commercial and proprietary orthorectification software is used to produce our high resolution imagery products.



6-Inch RGB + CIR Orthophotography, Rapid City, SD

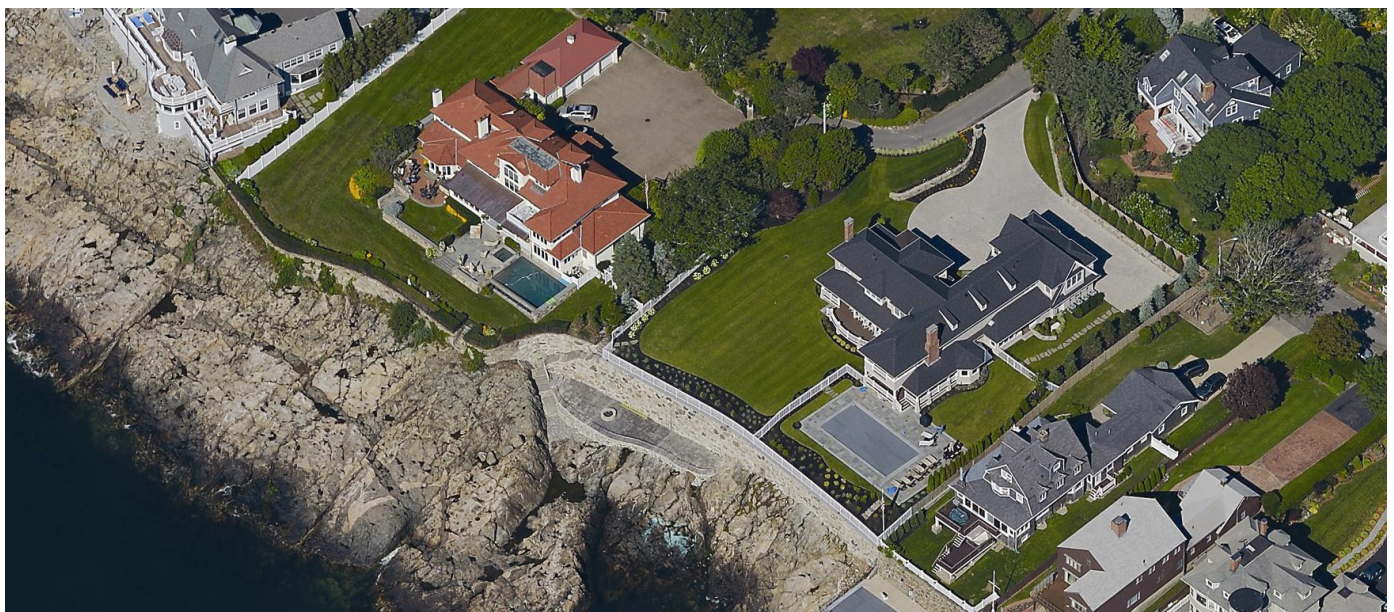
2.2 Aerial Oblique Imagery Acquisition and Processing Services

Fugro's oblique Panoramix mapping system collects imagery with an unprecedented level of detail, providing customers with efficient and accurate oblique imagery. Combined with powerful 3D mapping and visualization software, Panoramix transforms imagery into information.



With a single dataset, Panoramix answers the needs of multiple users, providing a true photogrammetric solution, from aerotriangulation through image rectification. High-resolution, high accuracy products include digital orthoimagery and oblique imagery, with a pixel resolution up to 2-inch GSD, and can easily meet 3-inch, 6-Inch, 9-inch and 12-inch GSD specifications. The Panoramix system incorporates its own ground processing tools to develop digital elevation models, as well as 3D topographic and planimetric GIS data layers, such as contours, and transportation networks. With full ownership of project deliverables, clients benefit from unlimited use of their data across an entire organization.

Panoramix data can be viewed interactively using PX Mapper, our user-friendly 3D mapping software that completes the Panoramix solution. Other features of the software include the ability to search images by address and coordinates, pan, zoom, roam, measure and digitize features from the imagery.



2.3 Aerial LiDAR Acquisition and Processing Services

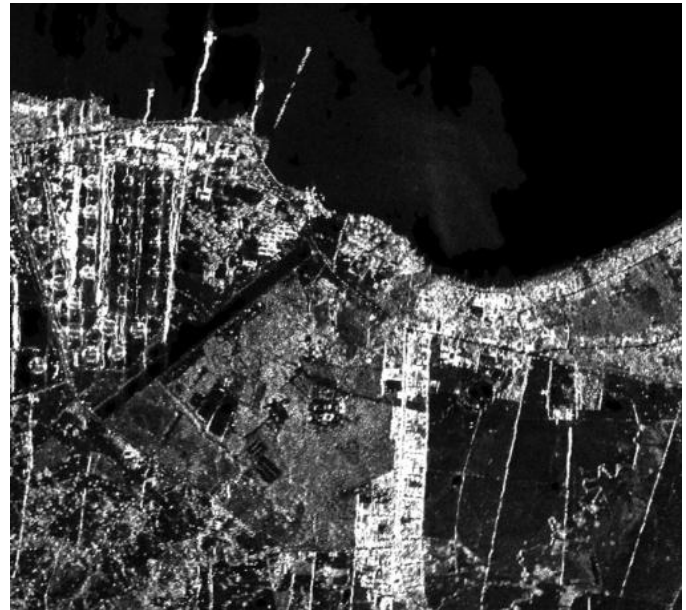
Fugro has provided LiDAR acquisition and production services for over 18 years. Our investment in LiDAR technology dates back to the early 1990s when we teamed with a hardware expert to design and build the first operational, wide-area Commercial Airborne LiDAR mapping system. This early R&D effort provided a solid foundation for Fugro to grow into the successful LiDAR mapping operation it is today, with demonstrated expertise planning and executing successful LiDAR mapping programs throughout the world.



2.4 RADAR/IFSAR Acquisition and Processing Services

Fugro's GeoSAR collects both X-band (reflective) and P-band (penetrative) Interferometric Synthetic Aperture (IFSAR) RADAR data simultaneously, to create high resolution elevation data over all terrain and canopy types. While other ISFAR providers interpolate the ground, GeoSAR provides direct measurement under the canopy. No other commercial system employs both X and P-band Foliage Penetration (FOPEN) in one system, for single pass, direct measurement mapping purposes.

The GeoSAR airborne radar mapping system operates day or night penetrating clouds and foliage. It rapidly collects high resolution digital elevation data and radar imagery over regions previously impossible to map due to weather, size, terrain, and foliage. The GeoSAR system is unique in its ability to map high accuracy terrain and surface feature data from a single flight.



GeoSAR X-band (left) and P-band (right) Comparison.



3 DESCRIPTION OF SERVICE CATEGORIES

Following is the list of proposed labor categories and descriptions, including minimum required education and minimum years of experience:

3.1 Flight Operations Manager

The flight operations manager supervises flight operations, safety, and readiness of aircraft to support customer requirements and needs. Responsibilities include flight crew management, safety programs, crew and aircraft scheduling, standardization, aircraft maintenance management, project management, and budget preparation and management for the flight operations department.

- Bachelor's degree in science, engineering, or business management desired
- 10 years of experience in aviation management
- Commercial pilot's license
- Experience as pilot in command of multi-engine aircraft
- Knowledge of foreign and domestic government/air carrier operations

3.2 Pilot (Conventional)

The pilot is in command of the aircraft and crew performing photogrammetric mapping and remote sensing missions. Ensures safe and efficient aircraft operation. Coordinates all missions with appropriate FBO's, FAA Flight Standard District Offices, military range control, and Air Traffic Controller facilities (military and civilian). Ensures all aircraft maintenance is properly accomplished and documented.

- High school diploma
- 2500 hours minimum total flying hours
- 500 hours flying hours in aircraft type (or equivalent aircraft) as pilot in command
- Current FAA designation as a commercial or airline transport pilot with unlimited multi engine and instrument rating

3.3 Pilot (Jet)

Pilots EarthData Gulfstream G-II aircraft equipped with GeoSAR, an interferometric synthetic aperture radar system used for ground mapping. The pilot is in command of aircraft and crew for conducting airborne data acquisition missions worldwide to meet customer specifications. Ensures safe and efficient aircraft operation. Coordinates all missions with appropriate FBO's, FAA Flight Standard District Offices, military range control, and Air Traffic Controller facilities (military and civilian). Ensures all aircraft maintenance is properly accomplished and documented.

- High school diploma
- Minimum of 4,000 hours total flying hours with at least 2,000 hours as pilot in command of turbojet aircraft, of which at least 500 hours are in the G-II.
- FAA Airline Transport Pilot rating and G-II ground and flight simulator training within the past year required.



3.4 Data Acquisition Coordinator

The data acquisition coordinator serves as crew chief, responsible for overall mission planning and organization as well as management of acquisition activities in the field. Generates and/or reviews flight plans for data acquisition, ensuring adequacy for the mission. Ensures appropriate flight/mission logs and other required documentation is completed. Qualified to operate one or more airborne sensors used for mapping and remote sensing applications. Conducts or supervises data collection and performs field data processing for quality assessment. Supervises deployment and operation of ground GPS equipment and associated personnel. Ensures proper records are maintained.

- High school diploma
- 3 to 5 years of experience in surveying, mapping, or GIS
- Knowledge of digital remote sensing equipment, GPS, camera systems, and basic software

3.5 Survey Team Lead

Provides technical expertise in establishing GPS base station and ground control requirements for aerial photography and remote sensing projects. When necessary, establishes geodetic control networks. Plans and coordinates logistics to support data acquisition. Schedules and supervises activities of field crew(s) to meet varying customer and project needs.

Communicates status of projects in a timely manner to project management staff. Keeps apprised of upcoming projects as well as changes to ongoing projects, and develops appropriate plans to utilize existing resources in an efficient manner.

- Bachelor's degree
- Active/valid professional surveying license in at least one state
- 10 to 12 years of experience in surveying
- 5 years of experience managing staff
- Survey field experience in appropriate surveying applications including field-to-finish data collection techniques.
- Experience in computer software applications for processing survey data, including applicable CAD packages.
- Experience with administrative and budgetary procedures.

3.6 Surveyor

Coordinates activities of the members of a field crew on projects. Conducts reconnaissance to locate existing control points and suitable photo identifiable (ID) points. Establishes new base station and photo ID points. Communicates status of fieldwork in a timely manner to Survey Team Leader. Keeps apprised of any changes in the requirements of the ongoing field project and reacts appropriately.

- High school diploma
- Active/valid professional surveying license in at least one state
- 5 to 7 years of experience in surveying
- Survey field experience in appropriate surveying applications including field-to-finish data collection techniques.
- Proficient with computer software applications for processing survey data.

3.7 Survey Technician

Locates and/or establishes control points and operates GPS base station equipment in support of aerial photography and airborne remote sensing missions.

- High school diploma.
- 2 to 3 years of experience in surveying
- Survey field experience in appropriate surveying applications.
- Familiarity with office software applications for processing survey data.

3.8 Quality Manager

The quality manager is responsible for the overall administration of the quality system and ensures the system is established, documented, understood, maintained, and continuously improved in order to meet our customer's requirements and expectations. Assists personnel in meeting customer quality standards through revision and improvement of processes and procedures within each department. Performs regular audits of the quality system and projects, initiates action to prevent occurrence of any nonconformity, and initiates and verifies corrective actions.

- BS/BA degree in in Surveying, Engineering, Geography, or GIS.
- 10 years experience in engineering, surveying, or mapping/GIS field
- 3 years of management experience
- 2 years of demonstrated experience in a leadership role promoting quality improvement and conducting internal quality audits.
- Experience in the production or use of geospatial products
- In-depth knowledge of quality practices, tools, standards, and management systems, including the ISO 9000 series of standards.

3.9 Quality Assurance Specialist

The quality assurance specialist assists in management of the quality program to support customer needs. Helps to ensure all production processes are documented and follow established protocols and serves as an independent QC reviewer of the customer's products prior to delivery.

- BS degree in Surveying, Engineering, Geography, or related field.
- 4 to 6 years of experience in engineering, surveying, or mapping/GIS field
- Experience in the production or use of geospatial products
- Knowledge of ISO 9001 specifications and requirements

3.10 Program Manager

The program manager shall ensure that projects are completed on time and to the required customer specifications. The program manager provides a central source of communication between the customer and the project team for all phases of project operations, including, but not limited to, contract finalization, quality assurance, subcontract coordination, schedule control, and project closeout.

- BS/BA degree in Surveying, Engineering, Geography, or equivalent combination of education and experience.
- 5 to 10 years of experience as project or production manager
- Active professional registrations or certifications (e.g. project management, photogrammetry, GIS, or surveying)
- 1 to 5 years of experience in financial planning, budgeting, and reporting
- Supervisory experience of 4-8 staff



3.11 Senior Project Manager

Overall project-level management responsibility to ensure customer satisfaction. Manages delivery and change orders and has regular communication with the customer and team members. Monitors and, in some cases, manages staff and subcontractors that work on specific customer projects. Coordinates with and prepares presentations for the customer. Also ensures prompt and accurate action by company staff, partners, and subcontractors in response to customer requirements.

- BS/BA degree in Surveying, Engineering, Geography, or related field.
- 8 years of experience as project or production manager
- Supervisory experience of 4 or more staff

3.12 Project Manager

Responsible for the detailed management of specific projects to ensure timely and accurate delivery to customers. Coordinates with program manager and other project managers as required. Provides guidance and direction to team members to ensure efficient use of resources. Uses web-based management system and other mechanisms for tracking progress, performance, and customer satisfaction.

- BS/BA degree in Surveying, Engineering, Geography, or related field.
- 5 years of experience as project or production manager
- Supervisory experience of 4 or more staff

3.13 Scheduler

The scheduler analyzes capacity and established delivery schedules to ensure projects are completed on time and first time right. Also plans for crises and surge requirements to support rapid response requirements.

- BS/BA in in Surveying, Engineering, Geography, or GIS
- 5 to 7 years experience in mapping, GIS, and/or photogrammetry
- 2 years minimum experience in supervisory/management role

3.14 Chief Scientist

Responsible for providing specialized advice to customers and staff on complex or unique technical projects. Is widely known in his/her field of expertise. Independently performs a variety of system analysis, design and/or engineering tasks that are broad and innovative in nature. Participates in national level steering and advisory groups, panels and committees within the customer's area of interest. Advises/mentors technical personnel at all levels and reviews work for technical accuracy. Guides the strategic growth of scientific customer programs.

- Master's or Ph.D. degree in engineering, scientific or technical fields
- Experience exceeds 20 years
- Active professional certification/registration in photogrammetry and surveying

3.15 Principal Scientist

Serves as technical support and ensures the calibration and adjustment of production equipment used to fulfill customer's requirements when needed. Responsible for evaluation of production hardware and software for accuracy and productivity. Ensures hardware and software used in production have been maintained and upgraded. Ensures that production processes proposed for a project will meet project accuracy requirements.

- MS or Ph.D. in computer science, electrical engineering, remote sensing, geometric sciences, or related field
- 15 years of experience in engineering, surveying, or mapping/GIS field
- 3 to 5 years of experience in a supervisory management/leadership role.



3.16 Scientist

Scientist supports technical customer initiatives, when necessary, working in conjunction with the Principal or Chief Scientist. Responsible for system calibration and validation of technical and accuracy requirements for technical services. Leads or supports external training requirements.

- MS degree in surveying, engineering, geography, GIS, or related field
- 8 to 10 years of experience in engineering, surveying, or mapping/GIS field
- 3 to 5 years of experience in a supervisory management/leadership role.

3.17 Developer

The developer will assist in developing and supporting creative products for customers and propagating knowledge and technical awareness of photogrammetry, remote sensing, and GIS sciences among the technical community. Also conducts basic and practical research of potential software/hardware customer solutions.

- BS/BA in computer science, electrical engineering, remote sensing, or geosciences
- 5 to 7 years of experience in engineering, surveying, or mapping/GIS field

3.18 Specialist

Technical support staff member responsible for developing and maintaining specialized processes that support customer requirements. Responsible for hardware and software used in customer applications. Promotes knowledge and technical awareness of all aspects of photogrammetry, remote sensing, and GIS sciences. Also supports external training requirements.

- BS/BA in computer science, electrical engineering, remote sensing or geometric sciences
- 7 years of experience in engineering, surveying, or mapping/GIS field

3.19 GIS Team Lead

The GIS team lead assigns, directs, and leads a team of technical professionals in photo interpretation, asset and natural resource analysis, vectorization, and field verification tasks to produce quality products for customers, with the goal of delivering all products on time and to customer specifications.

- BS/BA degree in surveying, engineering, geography, or GIS.
- 7 to 10 years of experience in Imagery-based cartography, and other aspects of GIS concepts
- 3 years of management/leadership experience.

3.20 GIS Analyst

The s GIS analyst collects, organizes, and interprets data to develop finished solutions and products that meet customer requirements. Responsibilities also include coordinating project tasks, provide training and support team lead when needed.

- BS/AA degree in Surveying, Engineering, Geography, or GIS
- 3 to 5 years of experience in mapping or GIS

3.21 GIS Technician

The GIS technician becomes familiar with and develops a thorough understanding of the technical side of GIS and photogrammetry. This knowledge is then applied in the areas of edit, interpretation, and vectorization to produce a variety of quality products that support customer requirements.

- BS/AAS degree in Surveying, Engineering, Geography, or GIS.
- 1 to 3 years of experience in GIS or mapping



3.22 Geospatial Analysis Team Lead

The geospatial analysis team lead leads a team in the production of a variety of geospatial products in compliance with associated specifications and customer supplied requirements. Product types include, but are not limited to, vector data, raster image data, raster map data, terrain/elevation data, hardcopy maps/charts and specialized analysis-based products. Assigns work to team members and assures all project related batch processes are scheduled and executed in a timely matter. Additional daily activities include creation and maintenance of project data, imagery manipulation, performing in-process quality checks (IQC) on own work and as well as others and generating plots of vector data/contours for QC and display purposes.

- BS/AAS degree in Surveying, Engineering, Geography, or GIS.
- 7 to 10 years of experience in imagery-based cartography, photo interpretation, photogrammetry and/or other geospatial applications.
- Experience in production management (preferred).

3.23 Geospatial Analyst

A geospatial analyst ensures geospatial products are in compliance with applicable customer specifications. Deliverable products include, but are not limited to, elevation data, raster data, hardcopy maps/charts and vector data. Activities also include creation and maintenance of project data, imagery manipulation (including generation of stereo pairs), performing In-Process Quality Checks.

- BS/AAS degree in Surveying, Engineering, Geography, or GIS.
- 3 to 5 years of experience in imagery-based cartography, photo interpretation and/or photogrammetry.

3.24 Geospatial Technician

A geospatial technician produces a variety of geospatial products in compliance with associated customer defined specifications. Products include, but are not limited to, elevation data, raster data, hardcopy maps/charts and vector data.

- BS/AAS degree in Surveying, Engineering, Geography, or GIS.
- 1 to 3 years of experience in compiling, organizing, analyzing and developing intelligence products from imagery and vector data

3.25 Imagery Analysis Team Lead

The imagery analysis team lead assigns, directs, and leads the digital imagery and finishing team in the production and analysis of image-based products for delivery to our customers, with the goal of delivering all projects on time and within budget, while meeting customer requirements. The imagery analysis team lead is responsible for all phases of team operations, including, but not limited to, administrative functions, scheduling, team assignments, quality assurance and control, personnel management, team performance monitoring, budget and schedule performance monitoring, and coordination and communication with other departments, teams, and management personnel.

- BS/AAS degree in geography or related field
- 7 to 10 years of experience producing and editing digital orthophotos
- Supervisory experience of 5 or more staff

3.26 Imagery Analyst

The imagery analyst processes and analyzes digital imagery from different sources to produce a variety of products that meets customer requirements. The Imagery Analyst will also provide training, perform independent quality review of other staff members work, provide technical support, and perform administrative duties as required.

- BS/AAS degree in in geography or related field
- 3 to 5 years of experience producing and editing digital orthophotos

3.27 Imagery Technician

Responsible for reviewing and editing digital imagery to ensure product meets job specifications and customer requirements.

- BS/AAS degree in geography or related field.
- 1 to 3 years of experience producing and editing digital orthophotos

3.28 Facility Security Officer

The facility security officer will have two primary areas of responsibility and authority: government security functions and site management. Government security function will pertain to staff clearances, automated information systems (AIS), communications security (COMSEC), and visiting personnel.

- High school diploma
- 7 years of experience in Industrial/Physical/Government Security/COMSEC
- Facility Officer Security Certification
- Ability to obtain and maintain a security clearance

3.29 Systems Administrator

The systems administrator performs engineering tasks involving design, development, and modification of computer systems to support internal or external customer IT requirements; also has some responsibilities as the assistant facility security officer. The systems administrator supervises all other systems and facility management personnel.

- MS/BS degree in an IT related field
- 10 to 12 years of experience PC's and Windows NT/Windows 95
- UNIX experience
- Ability to obtain and maintain a security clearance

3.30 Systems Analyst

The systems analyst performs hardware and software troubleshooting, installation, and modification of computer systems to support internal / external customer IT requirements.

- BS/AAS degree in an IT related field.
- 3 to 5 years of experience with PC's and Windows NT/Windows 95
- 1 to 2 years of UNIX experience desirable
- Ability to obtain and maintain a security clearance

4 DESCRIPTION OF OTHER DIRECT COST ITEMS

4.1 Piston Aircraft

Twin-engine piston aircraft equipped with autopilot GPS tracking system and transponder. It is designed for LiDAR and aerial photography missions, airborne GPS control surveys, thermal scanning, and similar functions at low to medium altitude and speed. Types of twin-engine piston aircraft include the Piper Navajo PA31 and Cessna 310,

4.2 Turbine Aircraft

Pressurized, turbo-prop aircraft, which can be used for both normal and high altitude aerial acquisition. These aircraft are often mounted with an imagery sensor in combination with airborne GPS. Types of turbine aircraft include the Cessna 441 Conquest and Beechcraft KingAir E90.

4.3 Gulfstream Aircraft (Geosar)

The Gulfstream II is a jet aircraft mounted with the GeoSAR imaging radar system to collect radar images and interferometric data at 2 different radar frequencies: X-band and P-band to support terrain modeling, feature modeling, foliage penetration, and other customer-based needs.

4.4 GeoSAR Radar

The GeoSAR is an airborne interferometric synthetic aperture radar system designed to collect radar images and interferometric data at 2 different radar frequencies: X-band and P-band for terrain and feature modeling, foliage penetration and analysis, and other remote sensing uses. From this data, Fugro EarthData can develop digital elevation/terrain models, orthorectified radar images, and perform feature and environmental analysis of the observed terrain.

4.5 Digital Imaging Sensor

Digital imaging sensors designed to collect stereoscopic and multispectral aerial imagery and oblique imagery to support terrain, infrastructure, asset, and property mapping. Types of digital imaging sensors include the Leica ADS, Intergraph DMC, Microsoft UltraCAM, and Panoramix Oblique Mapping sensor.

4.6 LiDAR Sensor

The LiDAR (Light Detection and Ranging) is an airborne laser instrument designed to collect terrain elevation data. Data collected by LiDAR is used to produce high-density elevation models of terrain and structures. Types of LiDAR sensors include the Leica ALS and Riegl.

4.7 Analog Camera

Conventional film-based camera with forward motion compensation, used to acquire aerial photography at various scales and from various altitudes. It can be equipped with either with a 6" or a 12" lens. Types of analog cameras include the Zeiss RMK TOP and Wild RC30.

4.8 GPS Receivers

Global Positioning System receivers used for airborne survey and ground control. Types of GPS receivers include the Ashtech Z-Xtreme and Ashtech Z-Surveyor.



5 GSA PRICING – LABOR CATEGORIES

Labor Category Title	OPTION 2				
	7/29/14 - 7/28/15	7/29/15 - 7/28/16	7/29/16 - 7/28/17	7/29/17 - 7/28/18	7/29/18 - 7/28/19
Flight Ops. Mgr.	\$149.59	\$152.58	\$155.63	\$158.75	\$161.92
Pilot (Conventional)	\$117.39	\$119.74	\$122.13	\$124.58	\$127.07
Pilot (Jet)	\$207.22	\$211.36	\$215.59	\$219.90	\$224.30
Data Acquisition Coordinator	\$117.60	\$119.95	\$122.35	\$124.80	\$127.29
Survey Lead	\$135.83	\$138.55	\$141.32	\$144.14	\$147.03
Surveyor	\$130.83	\$133.45	\$136.12	\$138.84	\$141.61
Survey Technician	\$89.81	\$91.61	\$93.44	\$95.31	\$97.21
Quality Manager	\$98.61	\$100.58	\$102.59	\$104.65	\$106.74
Quality Assurance Specialist	\$78.59	\$80.16	\$81.77	\$83.40	\$85.07
Program Manager	\$185.64	\$189.35	\$193.14	\$197.00	\$200.94
Senior Project Manager	\$148.25	\$151.22	\$154.24	\$157.32	\$160.47
Project Manager	\$131.67	\$134.30	\$136.99	\$139.73	\$142.52
Scheduler	\$110.64	\$112.85	\$115.11	\$117.41	\$119.76
Chief Scientist	\$244.44	\$249.33	\$254.32	\$259.40	\$264.59
Principal Scientist	\$201.32	\$205.35	\$209.45	\$213.64	\$217.92
Scientist	\$153.38	\$156.45	\$159.58	\$162.77	\$166.02
Developer	\$117.22	\$119.56	\$121.96	\$124.39	\$126.88
Specialist	\$119.90	\$122.30	\$124.74	\$127.24	\$129.78
GIS Team Lead	\$130.88	\$133.50	\$136.17	\$138.89	\$141.67
GIS Analyst	\$95.91	\$97.83	\$99.78	\$101.78	\$103.82
GIS Technician	\$85.75	\$87.47	\$89.21	\$91.00	\$92.82
Geospatial Analysis Team Lead	\$121.11	\$123.53	\$126.00	\$128.52	\$131.09
Geospatial Analyst	\$93.47	\$95.34	\$97.25	\$99.19	\$101.17
Geospatial Technician	\$90.49	\$92.30	\$94.15	\$96.03	\$97.95
Imagery Analysis Team Lead	\$130.88	\$133.50	\$136.17	\$138.89	\$141.67
Imagery Analyst	\$89.20	\$90.98	\$92.80	\$94.66	\$96.55
Imagery Technician	\$81.87	\$83.51	\$85.18	\$86.88	\$88.62
Facility Security Officer	\$136.95	\$139.69	\$142.48	\$145.33	\$148.24
Systems Administrator	\$170.10	\$173.50	\$176.97	\$180.51	\$184.12
Systems Analyst	\$163.30	\$166.57	\$169.90	\$173.30	\$176.76



6 GSA PRICING – OTHER DIRECT COSTS (ODC'S)

ODC	OPTION 2				
	7/29/14 - 7/28/15	7/29/15 - 7/28/16	7/29/16 - 7/28/17	7/29/17 - 7/28/18	7/29/18 - 7/28/19
Piston Aircraft	\$807.80	\$823.96	\$840.44	\$857.24	\$874.39
Gulfstream Aircraft (GeoSAR)	\$11,096.78	\$11,318.72	\$11,545.09	\$11,775.99	\$12,011.51
GeoSAR Radar	\$8,741.32	\$8,916.15	\$9,094.47	\$9,276.36	\$9,461.89
Turbine Aircraft	\$1,446.73	\$1,475.66	\$1,505.18	\$1,535.28	\$1,565.99
Digital Imaging Sensor	\$1,028.54	\$1,049.11	\$1,070.09	\$1,091.49	\$1,113.32
LiDAR	\$721.80	\$736.24	\$750.96	\$765.98	\$781.30
Analog Camera	\$148.72	\$151.69	\$154.73	\$157.82	\$160.98
GPS Receivers	\$19.64	\$20.03	\$20.43	\$20.84	\$21.26

7 SERVICE CONTRACT ACT

The Service Contract Act (SCA) is applicable to this contract and it includes SCA applicable labor categories. The prices for the indicated (**) SCA labor categories are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCA matrix. The prices awarded are in line with the geographic scope of the contract (i.e. nationwide).

Service Contract Act (SCA) Matrix		
SCA Eligible Contract Labor Category	SCA Equivalent Code Title	WD Number(s)
Data Acquisition Coordinator	30030 - Cartographic Technician	2005-2103
Survey Technician	99832 - Surveying Technician	2005-2103
GIS Analyst	30063 - Drafter/CAD Operator III	2005-2103
GIS Technician	30061 - Drafter/CAD Operator I	2005-2103
Geospatial Analyst	30062 - Drafter/CAD Operator II	2005-2103
Geospatial Technician	30062 - Drafter/CAD Operator II	2005-2103
Imagery Analyst	30061 - Drafter/CAD Operator I	2005-2103
Imagery Technician	99510 - Photofinishing Worker	2005-2103